

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF AN EXCLUSIVE/PERMISSVE LEFT TURN MOVEMENT FOR SOUTHBOUND US 1 APPROACH, AT THE INTERSECTION OF US 1 AND KNOX ROAD IN PRINCE GEORGE'S COUNTY.

INTERSECTION OPERATION

THIS INTERSECTION WILL OPERATE IN A SEMI- ACTUATED MODE WITH US 1 NORTHBOUND AND SOUTHBOUND LEFT TURN MOVEMENTS OPERATING IN AN EXCLUSIVE/PERMISSIVE PHASE AND THROUGH MOVEMENTS SHALL OPERATE CONCURRENTLY. THE SIDE STREETS SHALL OPERATE CONCURRENTLY.

THE EXISTING BASE MOUNTED CABINET SHALL BE RETRO FIT WITH A - (4) FOUR CHANNEL RACK MOUNTED LOOP DETECTOR AMPLIFIERS. THIS WORK SHALL BE COMPLETED BY SHA- TRAFFIC SIGNAL SHOP.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

MR. CHARLIE WATKINS, DISTRICT ENGINEER
PHONE: (301) 513-7300
MR. MAJID SHAKIB, ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301) 513-7300
MR. DENNIS MCMAHAN, ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: (301) 513-7300
MR. AUGIE REBISH, ASSISTANT DISTRICT ENGINEER-UTILITY
PHONE: (301) 513-7300
MR. RICHARD L. BAFF, SR., CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00, -104.30, 104.03-02, 104.13, -02, 104.45-02, 104.46-02

3. THE CONTRACTOR SHALL CONTACT SHA SIGNAL SHOP, 5 DAYS PRIOR TO THE START OF WORK.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9000	1	EA	DETECTOR RACK RETROFIT
9001	1	EA	SHEET ALUMINUM SIGNS CONSISTING OF:
	10.5	SF	RI0 - 12 (LEFT TURN YEILD ON GREEN BALL 36" X 42")
			MAST ARM MOUNT
9002	1	EA	DETECTOR AMPLIFIER RACK MOUNTED
			FOUR CHANNEL
9004	1	EA	DETECTOR RACK POWER SUPPLY
9007	1	EA	NEMA LOAD SWITCH

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

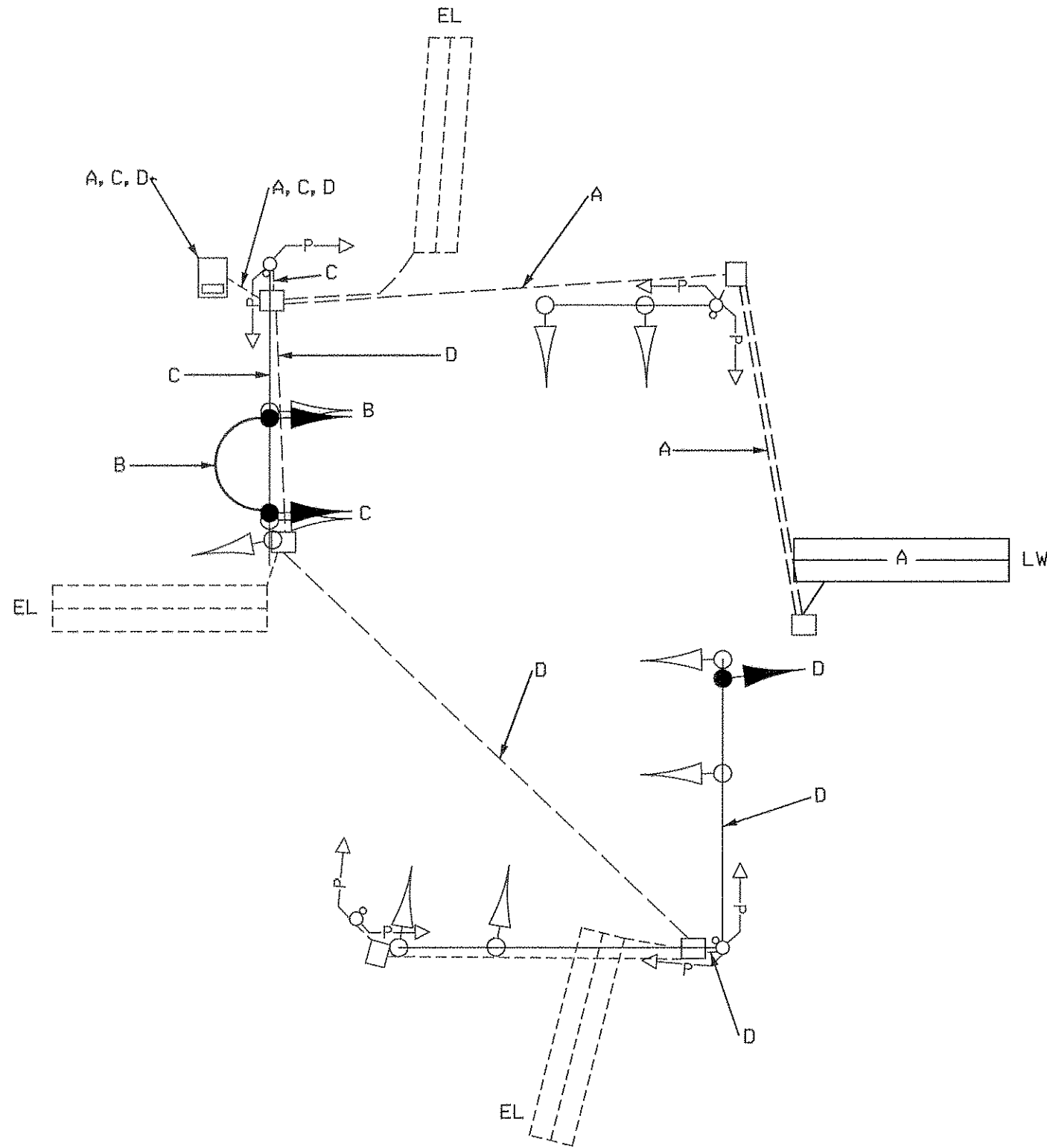
ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
5005	40	LF	FURNISH AND INSTALL 24 IN. WHITE HEATED APPLIED THERMOPLASTIC PAVEMENT MARKING
5008	40	LF	REMOVAL OF EXISTING PAVEMENT MARKING LINE-ANY WIDTH
8010	10	EA	FURNISH AND INSTALL 12 IN. SIGNAL HEAD SECTION
8018	3	EA	FURNISH AND INSTALL 8 IN. SIGNAL HEAD SECTION
8037	1	EA	REMOVE AND DISPOSE OF EXISTING MATERIAL.
8059	45	LF	FURNISH AND INSTALL 4 IN. SCHEDULED 80 PVC CONDUIT - SLOTTED
8060	6	LF	FURNISH AND INSTALL 1 IN. NON-METALLIC CONDUIT - SLEEVE
8063	1	EA	INSTALL HANDHOLE
8066	10.5	SF	INSTALL OVERHEAD SIGN
8073	135	LF	FURNISH AND INSTALL 2-CONDUCTOR, (ALUMINUM SHIELDED) ELECTRICAL CABLE
8076	20	LF	FURNISH AND INSTALL 5-CONDUCTOR, (NO. 14 AWG) ELECTRICAL CABLE
8077	325	LF	FURNISH AND INSTALL 7-CONDUCTOR, (NO. 14 AWG) ELECTRICAL CABLE
8078	430	LF	FURNISH AND INSTALL LOOPWIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG) ELECTRICAL CABLE
8079	110	LF	FURNISH AND INSTALL SAWCUT

C. MATERIALS TO BE REMOVED AND RETURNED TO SHA.

ALL EXISTING SIGNAL MATERIAL ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

NONE

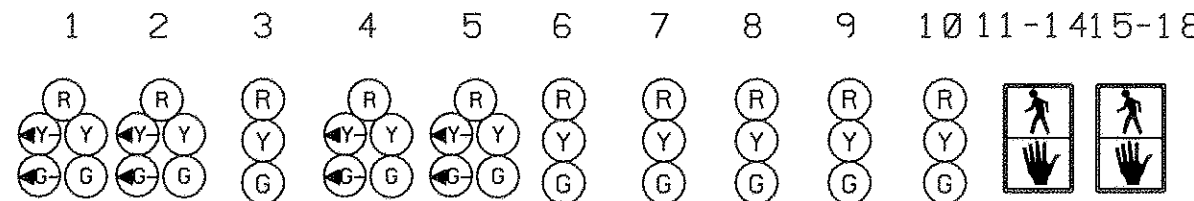
WIRING DIAGRAM



WIRING KEY

- A - 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) ALUMINUM SHIELDED
- B - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- C } 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- D }
- LW - LOOP WIRE
- EL - EXISTING LOOP

PHASE CHART



PHASE 1 AND 5	←G/R	←G/R	R	←G/R	←G/R	R	R	R	R	R	R	R	R	DW	DW	
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																
PHASE 1 AND 6	R	R	R	←G/G	←G/G	G	R	R	R	R	R	R	R	DW	DW	
1 AND 6 CHANGE	R	R	R	←Y/G	←Y/G	G	R	R	R	R	R	R	R	DW	DW	
PHASE 2 AND 5	←G/G	←G/G	G	R	R	R	R	R	R	R	R	R	R	DW	DW	
2 AND 5 CHANGE	←Y/G	←Y/G	G	R	R	R	R	R	R	R	R	R	R	DW	DW	
ALTERNATE PHASES 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R	R	WK	DW	
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	R	R	FL/DW	DW	
ALTERNATE PHASES 2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	DW	DW	
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G	G	G	DW	DW	
4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	Y	DW	DW	
ALTERNATE PHASES 4 AND 8	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	Y	DW	WK	
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	G	G	G	DW	FL/DW	
ALTERNATE PHASES 4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	Y	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	